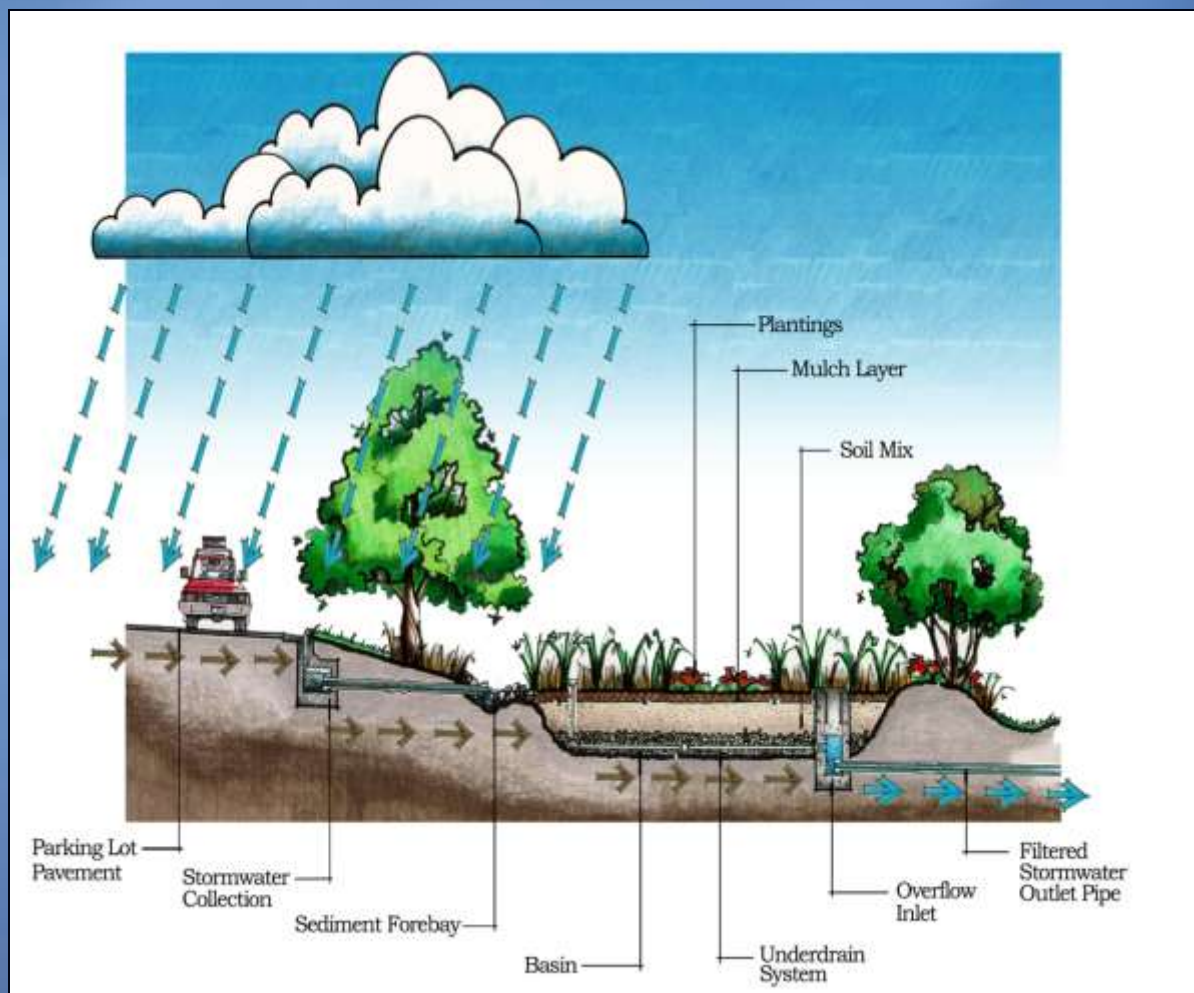


NCDOT Stormwater Management at Rest Areas



NCDOT Assets

■ NCDOT System

- 80,000 road miles
- 160,000 paved lane miles
- 13,500 bridges
- 88 million sq. ft. bridge deck area
- 8,900 traffic signals
- 60 rest areas
- 1,600 stormwater control devices



NCDOT Highway Stormwater Program

Main Program Areas

1. Construction
2. Encroachments
3. Illicit Discharges Detection and Elimination
4. Industrial Facilities
5. Research
6. Public & Internal Education
7. Post Construction



Stormwater Permit Requirements Inspection and Maintenance Program

- Evaluate BMP Inspection and Maintenance Needs (Create Stormwater Control Inventory)
- Develop a BMP Inspection and Maintenance Manual
- Develop and Implement a BMP Inspection and Maintenance Program

Types of Stormwater Control Devices Located at Rest Areas

- Pet Waste Stations (145)
- Filtration Basin (2)
- Stormwater Wetland (2)
- Hazardous Spill Basin (13)
- Grade Control Structure (1)
- Cistern (5)
- Permeable Pavement (2)
- Dry Detention Basin (1)
- Infiltration Basin (1)
- Bioretention Basin (4)
- Green Roof (1)

Stormwater Control Device

Pet Waste Station



Stormwater Control Device

Bioretention Basin



Stormwater Control Device

Dry Detention Basin



Stormwater Control Device

Hazardous Spill Basin



Stormwater Control Device

Filtration Basin



Stormwater Control Device

Infiltration Basin



Stormwater Control Device

Stormwater Wetland



Stormwater Control Device

Permeable Pavement



Stormwater Control Device

Cistern



Stormwater Control Device

Green Roof



Stormwater Control Device

Green Roof



Stormwater Control Inspection and Maintenance Manual

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

STORMWATER CONTROL
INSPECTION AND MAINTENANCE MANUAL



North Carolina
Department of Transportation



NCDOT- HSP- 2010- 01



BMP Inspection & Maintenance Manual

Content

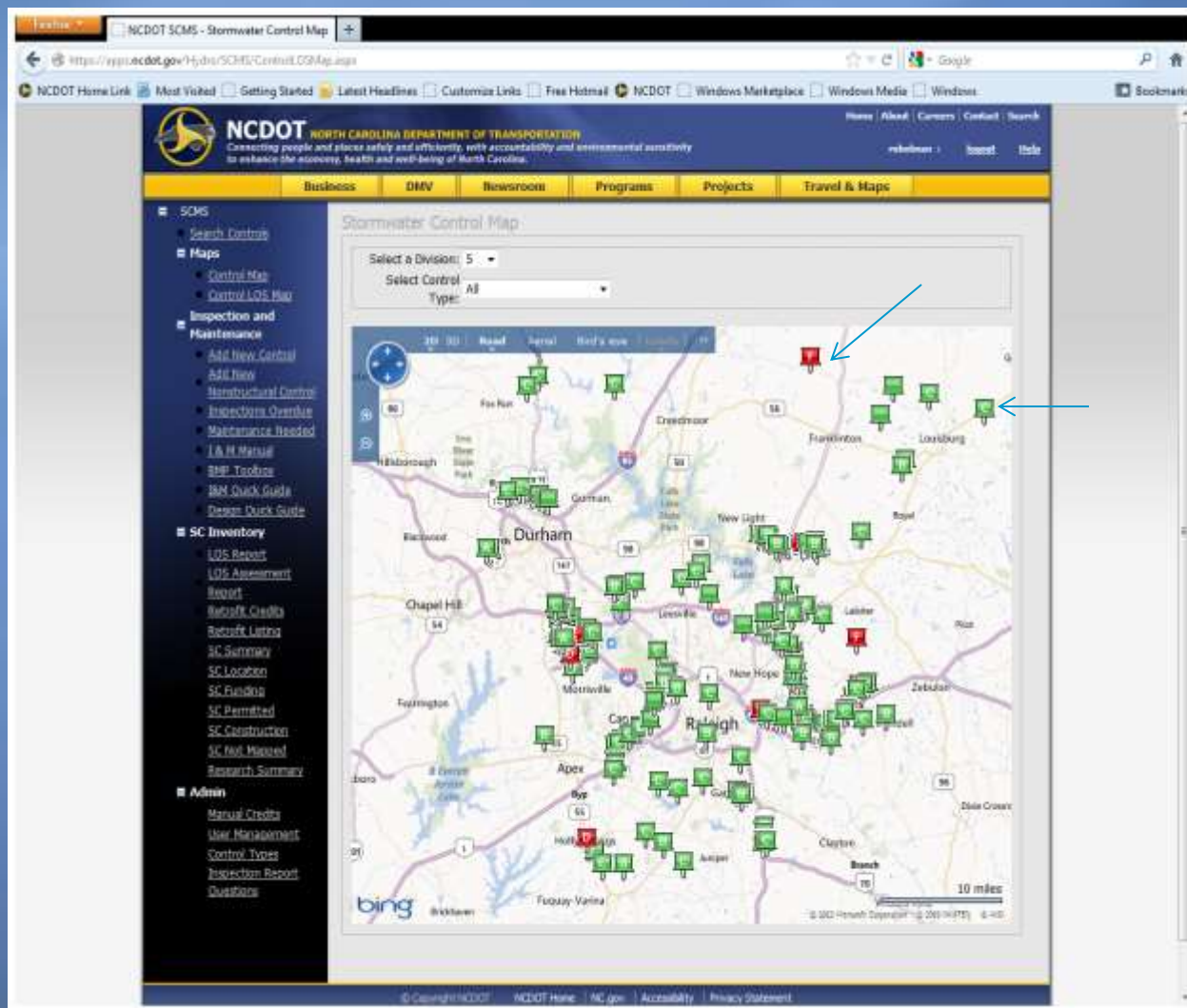
Table of Contents

- Introduction
- Inspection
- Reporting & Record Keeping
- Chapters on (13) Control Devices
- Inspection Checklist & Naming Convention

For a link to manual: kpace@ncdot.gov



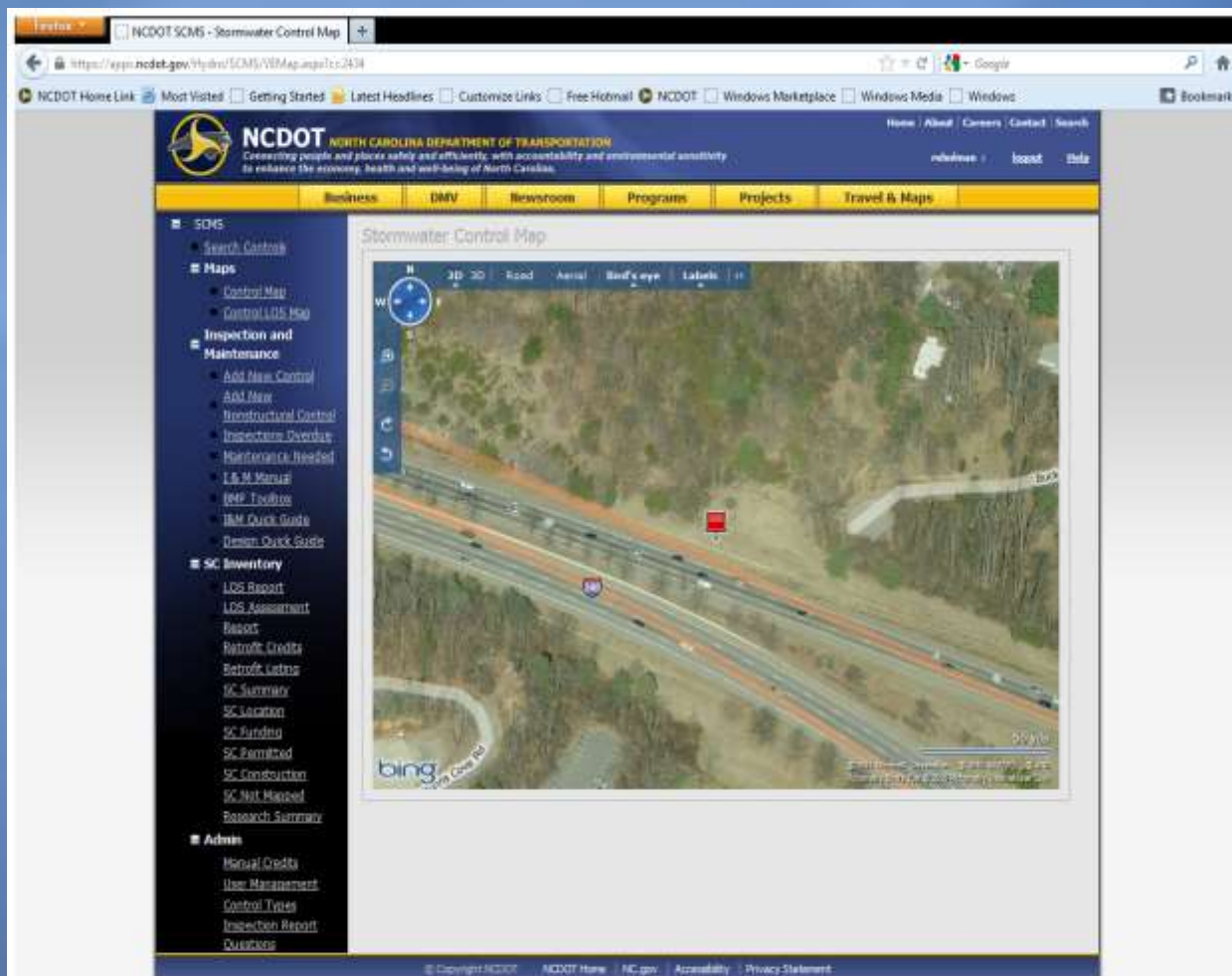
Stormwater Control Management System (SCMS) NCDOT Intranet Website Map of Division's Device Locations



Stormwater Control Management System (SCMS) NCDOT Intranet Website

Map of Control's Location – Bird's Eye View

.....



Stormwater Control Management System (SCMS) NCDOT Intranet Website

Inspection Report

NCDOT SCMS - Inspection and Maint...

https://apps.ncdot.gov/Inspection.aspx?cs=2091&u=2109

NCDOT Home Link Most Visited Getting Started Latest Headlines Customise Links Free Hotmail NCDOT Windows Marketplace Windows Media Windows

NCDOT NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Connecting people and places safely and efficiently, with accountability and environmental sensitivity to enhance the economy, health and well-being of North Carolina.

Home About Careers Contact Search

Business DMV Newsroom Programs Projects Travel & Maps

SCMS

- Search Controls
- Maps
 - Control Map
 - Control LOS Map
- Inspection and Maintenance
 - Add New Control
 - Add New Inspectional Control
 - Inspection Overview
 - Maintenance Request
 - I & M Manual
 - BME Toolbox
 - BM Quick Guide
 - Green Quick Guide
- SC Inventory
 - LOS Report
 - LOS Assessment Report
 - Retrolink Credits
 - Retrolink Jobs
 - SC Summary
 - SC Location
 - SC Function
 - SC Permitted
 - SC Construction
 - SC Not Maint
 - Research Summary
- Admin
 - Manual Credits
 - User Management
 - Control Types
 - Inspection Report
 - Questions

Inspection Report

Control ID: BM-5-32-5-2691

Inspection Date: 10/26/2011

Inspector: Sholman

Questions: Y N N/A

- ☒ Forebay is structurally sound and functional.
- ☒ Inlet and outlet drainage systems are structurally sound and functional.
- ☒ Side slopes and bottom of swale are structurally sound, and functional.
- ☒ Water quality rock checks are structurally sound and functional if present.
- ☒ Forebay is clean free of silt, leaves, trash, and other debris.
- ☒ Inlet and outlet ditches/pegs are free of sediment, leaves, trash, and other debris.
- ☒ Is erosion occurring within the swale? (If yes, describe in Comments section).
- ☒ Swale is clean free of silt, leaves, trash and other debris.
- ☒ Swale has an established stand of turf grass.
- ☒ Swale has been mowed and undesirable vegetation removed.
- ☒ If present, rock checks retain dimensions and have adequate riprap and No. 57 stone.
- ☒ Are structural repairs needed at this site? (If yes, describe in Comments section).
- ☒ Are there maintenance needs at this site? (If yes, describe in Comments section).
- ☒ Were maintenance activities conducted during the time of inspection? (If yes, describe in Comments section).

LOS Ranking: B - Minor maintenance needs found but functioning properly.

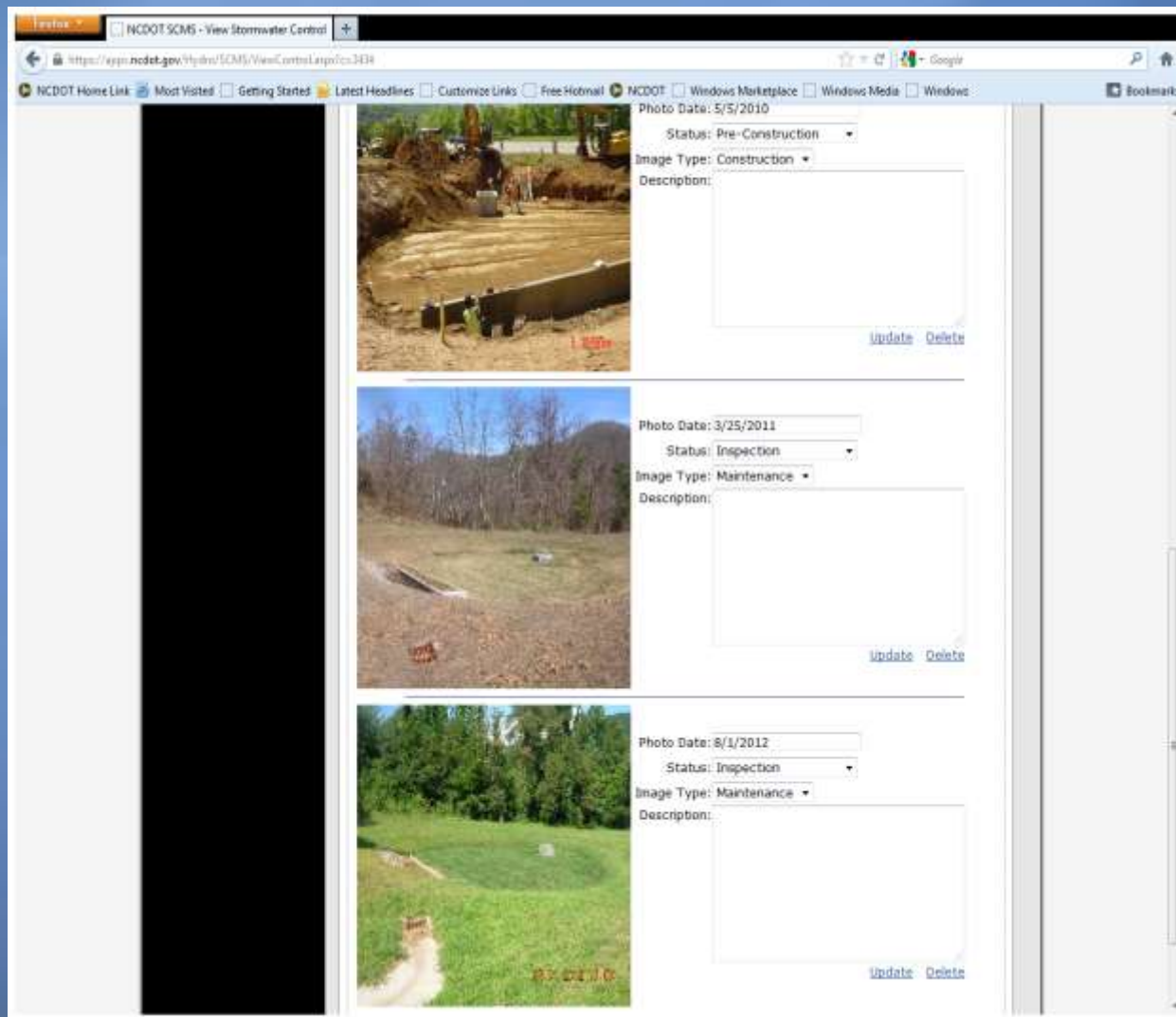
Inspection: Woody vegetation in swale - remove.

Observations/Comments: Two inlet grates drain into device - monitor debris buildup.
Remove trash & debris from pipe outlet to inlet grate.

Maintenance Needed: ☐

Stormwater Control Management System (SCMS) NCDOT Intranet Website

Pictures of Device



Maintenance Needs Increase with Time

(Mostly in the form of vegetation control)



New



1 to 2 years



3 to 5 years

NCDOT Highway Stormwater Program Questions?

